

IN THE CLAIMS

Page 10, line 1, change "Patent Claims" to --What is claimed is:--.

Claims 1-9 (cancelled).

10. (New) A device for welding a joining contour by laser radiation, comprising:

a laser diode;

a light-conducting fiber which is arranged in front with reference to the radiating direction of the laser diode, the beam bundle emitted by the laser diode being coupled into an entrance surface of the light-conducting fiber and an exit surface of the light-conducting fiber being arranged in front of a beam-shaping optical unit with reference to the direction of radiation so that the beam bundle images a focal spot, by way of the beam-shaping optical unit, on a workpiece surface arranged downstream of the beam-shaping optical unit;

said beam-shaping optical unit comprising at least one gradient index lens which is connected to at least one linear movement unit by which the gradient index lens is deflected radial to the exit surface by a displacement path in order to generate a deflection of the beam bundle so that the focal spot scans a joining contour on the workpiece surface.

11. (New) The device according to claim 10, wherein the beam-shaping optical unit comprises exactly one (the first) gradient index lens which is connected to two linear movement units provided by a first and a second piezo actuator 6.1, 6.2 which cause a deflection of the first gradient index lens in directions perpendicular to one another.

12. (New) The device according to claim 10, wherein the beam-shaping optical unit comprises exactly two gradient index lenses which are arranged one behind the other with reference to the direction of radiation and which are connected, respectively, to a linear movement unit provided by a first and a second piezo actuator in order to deflect in directions perpendicular to one another with respect to the exit surface.

13. (New) The device according to claim 10, wherein the beam-shaping optical unit is constructed in such a way that the exit surface is arranged at a distance of less than 0.3 mm in front of the first optical surface and the workpiece surface is arranged at a distance of greater than 10 mm behind the final optical surface of the beam-shaping optical unit, and the beam-shaping optical unit has an imaging scale of greater than 30.

14. (New) The device according to claim 11, wherein the beam-shaping optical unit is constructed in such a way that the exit surface lies in its object plane and the workpiece surface lies in the image plane in the undeflected state, and the beam-shaping unit has a depth of focus range that is greater than a maximum change in distance of a non-plane workpiece surface over the range of deflection relative to the final optical surface of the beam-shaping optical unit.

15. (New) The device according to claim 11, wherein the first piezo actuator and the second piezo actuator are connected to the first gradient index lens directly by an arm which translates the actuating path of the piezo actuators into the displacement paths of the first gradient index lens.

16. (New) The device according to claim 15, wherein the piezo actuators are fixedly attached, respectively, by one end to a base plate and contact a bearing plate of the arm, respectively, by their free end, and the bearing plate is swivelable around a pivot point that is fixed with respect to the base plate so that when the piezo actuators are activated the bearing plate and, therefore, the arm are swiveled around the pivot point corresponding to their actuating paths.

17. (New). The device according to claim 16, wherein the pivot point is defined by a pivot joint which is located at one end of a third piezo actuator that determines the distance of the pivot point from the base plate parallel to the piezo actuators.

18. (New) The device for welding a joining contour by laser radiation, wherein it comprises a plurality of devices according to claim 10 which are arranged relative to one another in such a way that the respective scanned joining contours correspond to partial joining contours which combine to form a larger closed joining contour without overlapping of the partial joining contours.